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U.S. DISTRICT COURT

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IN THE UNITED STATES DISTRICT COURT
DISTRICT OF UTAH, NORTHERN DIVISION

UNITED STATES OF AMERICA,	:	1:11 CR 132 CW
	:	SUPERSEDING INDICTMENT
Plaintiff,	:	
	:	VIO.
vs.	:	Theft of Trade Secrets
	:	[18 U.S.C. 1832(a)(2)]
PRABHU PRASAD MOHAPATRA,	:	(Counts 1-5)
	:	
Defendant.	:	Wire Fraud and Attempt
	:	[18 U.S.C. §§ 1343 and
	:	1349]
	:	(Counts 6-20)
	:	
	:	Computer-Related Fraud
	:	[18 U.S.C. § 1030(a)(4)]
	:	(Counts 21-26)

The Grand Jury charges:

At all times material to this Indictment:

Introduction

General Background.

1. PRABHU PRASAD MOHAPATRA (“MOHAPATRA”) was a resident of the North Logan, Utah area and a citizen of India lawfully residing and working in the United States.

2. MOHAPATRA was employed as a PhD chemist by Frontier Scientific, Inc. (“FSI”), a Logan, Utah company. Echelon Biosciences, Inc. (“EBI”) was an affiliate of FSI.

3. FSI was in the business of formulating, producing, and selling chemical compounds in commercial quantities for use in the research, trials, and production of pharmaceuticals.

Background on Relevant Chemicals, Trade Secrets, and Non-Competition.

4. A porphyrin is a type of pigment found in many living things, such as chlorophyll which make plants green, and hemoglobin, which makes blood red. Porphyrins can be synthetically derived in a laboratory setting and are widely used in medical, pharmaceutical, and scientific research.

5. Dipyrrromethane is a type of chemical compound used in, among other things, the laboratory synthesis of some porphyrins, and is known as a precursor for some porphyrins.

6. Fe(III) meso-Tetra (o-dichlorophenyl) Porphine Chloride is a type of chemical compound used in, among other things, the study of biological processes and as a catalyst in the organic synthesis of other chemical compounds.

7. Octaethylporphine, also known as Octaethylporphyrin, is a type of chemical compound used in, among other things, the study of biological processes and as a key component in materials developed as light emitting diodes (LEDs) and in oxygen sensors.

8. Meso-Tetra(2-pyridyl) porphyrin is a type of chemical compound used in, among other things, the study of biological processes and as a component in new solar cell development and for use in development of new battery technologies.

9. Meso-Tetraphenylporphine also is a type of chemical compound utilized in, among other things, components in new solar cell development and for use in development of new battery technologies. Meso-Tetraphenylporphine is also a key component in the formation of some plastic coatings and paints, and in LEDs

and numerous biological applications.

10. A significant part of FSI's business is the production and sale of porphyrins and their various precursors, including those described in paragraphs 5 through 9, and the production and sale of other chemical compounds used in research.

11. FSI has developed a number of unique processes for the production of chemical compounds it sells. Such processes may include public information, but also include information proprietary to FSI, such as the exact manner in which chemical compounds are produced. An important part of FSI's business plan is to constantly improve its production processes to maximize the yield and purity of the chemical compounds it sells. When a process for producing a chemical compound is utilized, modified, or improved, the chemist working on the compound records the results in a lab notebook computer database accessible only to chemists and corporate management.

12. The chemical compound production processes developed by and belonging to FSI are valuable in that they describe production methods unique to FSI, and afford FSI production advantages over competitors, among other benefits.

13. FSI takes steps to protect its chemical compound production processes by keeping them stored on a password-protected database, encrypting information, and alerting employees and others with written warnings and agreements describing the protected nature of the processes, among other methods.

14. MOHAPATRA's duties at FSI included the production of numerous of FSI's commercial chemical compounds related to porphyrins, which enabled him to gain access to all of the chemical compound production processes in the computerized lab notebook. Nevertheless, MOHAPATRA was authorized and entitled to access the chemical compound production processes in the computerized lab notebook only in connection with his duties at FSI.

15. All FSI employees granted access to the lab notebook database, including MOHAPATRA, were required to sign confidentiality agreements and were exposed to written warnings about the private nature of the chemical compound production processes. All such employees also were required to sign non-competition agreements with FSI, in which the employee agreed not to engage in business activities which compete with FSI or which were a conflict of interest with the employee's duties at FSI. MOHAPATRA signed a Confidentiality and Non-Competition Agreement with FSI on October 19, 2009.

Background on MOHAPATRA, A.B., and MedChemBlocks.

16. A.B. was a fellow chemist and a friend of MOHAPATRA'S, residing and working in India.

17. In 2011, on the recommendation of MOHAPATRA, FSI contracted with A.B. and A.B.'s company, Dr. SilviuPharmachem (DSP), for DSP to produce for FSI meso-Tetra(2-pyridyl) porphyrin, a chemical compound used and sold by FSI. On or about July 15, 2011, in connection with this work, but contrary to his supervisor's instructions, MOHAPATRA sent A.B. an email containing FSI's process for the production of meso-Tetra(2-pyridyl) porphyrin to assist A.B. in fulfilling the contract.

18. On or about September 1, 2011, A.B. requested MOHAPATRA'S assistance in responding to a request from a German competitor of FSI, regarding production of the compound meso-Tetraphenylporphine. On or about the same date, MOHAPATRA replied with an email containing FSI's process for the production of meso-Tetraphenylporphine, subject captioned "Confidential."

19. On or about August 9, 2011, MOHAPATRA and A.B. began discussions regarding a joint business venture. On or about September 1, 2011, MOHAPATRA formally solicited A.B.'s participation with MOHAPATRA in the

formation of a new company in India for the production and marketing of chemical compounds. As discussed in subsequent emails, between approximately September 1, 2011 and October 25, 2011, the new business was given the name MedChemBlox (later altered to MedChemBlocks) ("MCB"), and steps were taken to register the business in India. Additionally, one or more outside advisors were recruited, and product and marketing plans were developed, as further detailed below.

20. On or about September 4, 2011, MOHAPATRA further advised A.B. that once the new company was registered, they would create a website and MOHAPATRA would attempt to get purchase orders from FSI. He further assured A.B. that their new company would not compete with A.B.'s own company, DSP.

21. On or about September 11, 2011, MOHAPATRA recruited his brother-in-law, H.K., a resident and native of India, to serve as a joint owner of the new business with A.B. on behalf of MOHAPATRA.

22. On or about September 24-25, 2011, MOHAPATRA and A.B. exchanged email messages on the subject of "New Porphyrin Proucts" [sic] [products]. In the originating email, A.B. included an attachment, and requested

“new ideas” from MOHAPATRA. MOHAPATRA responded that his supervisor at FSI would not “accept it,” (the information in the attachment) and advised that the porphyrin products suggestions instead be sent to Echelon Biosciences, Inc. (EBI), an affiliate of FSI.

23. On or about September 29, 2011, MOHAPATRA provided A.B. with open-source research for five chemical compounds requested by A.B. for himself and the new company, which research MOHAPATRA obtained from the paid-subscription database SciFinder subscribed to by FSI.

24. On or about October 21, 2011, A.B. informed MOHAPATRA that the total company registration expenditures were “43,000-45,000/-INR” [Indian Rupees]. MOHAPATRA replied by email that he would send the money, and that he wanted to complete development of the website himself and suspend contractor work on it. On or about October 22, 2011, MOHAPATRA instructed A.B. to change the company’s name to ‘MedChemBlocks’.

25. On or about October 23, 2011, A.B. requested information from MOHAPATRA on the synthesis of the compound Octaethylporphyrin, following an inquiry relating to the compound A.B. received from a German company in competition with FSI. A.B. also requested information on two chemical

compound “building blocks,” 1-formyldipyrromethane and 1,9-diformyldipyrromethane. MOHAPATRA sent A.B. the requested information from SciFinder.

26. On or about October 24, 2011, MOHAPATRA accessed FSI’s computerized lab notebook, copied a chemical production process for the chemical compound Octaethylporphyrin, and sent the copied process to A.B. via email. Also on or about October 24, 2011, MOHAPATRA accessed FSI’s computerized lab notebook, copied a chemical production process for the chemical compounds 1-formyldipyrromethane and 1,9-diformyldipyrromethane, and sent the copied process to A.B. via email. A.B. replied that the information was “very valuable help. It will save my [sic] lots of experimental efforts.”

27. On or about October 25, 2011, MOHAPATRA acknowledged in an email to A.B. and H.K. that he was satisfied with the appearance of the proposed website for the new company, MedChemBlocks, and informed them that he had purchased the domain name “www.MedChemBlocks.com”.

28. On or about October 25, 2011, MOHAPATRA accessed FSI’s computerized lab notebook, copied a chemical production process for the chemical compound 2,2’-dipyrromethane, and sent the copied process to A.B. via email.

29. On or about October 25, 2011, MOHAPATRA, in a written performance evaluation, advised his supervisor that he wanted to be made in charge of “outsourcing,” which would have given him a significant degree of control over decisions regarding which companies FSI contracted with to supply compounds.

30. On or about October 26, 2011, MOHAPATRA accessed FSI’s computerized lab notebook, copied chemical production processes for the chemical compound Fe [III] meso-tetra [o-dichlorophenyl] porphine chloride, and sent the copied process to A.B. via email.

COUNTS 1-5

1. The Grand Jury re-alleges the allegations of the Introduction portion of this Superseding Indictment, paragraphs 1 through 30, as though fully set forth herein.

2. On or about the dates set forth below, in the Northern Division of the District of Utah and elsewhere,

PRABHU PRASAD MOHAPATRA,

the Defendant herein, with the intent to convert a trade secret that is related to and included in a product that is produced for and placed in interstate and foreign

commerce, to the economic benefit of a person other than the owner thereof, and intending and knowing that the offense will injure the owner of that trade secret, knowingly, and without authorization, copied, duplicated, downloaded, uploaded, transmitted, communicated and conveyed such information, to wit: defendant PRABHU PRASAD MOHAPATRA, without authorization, did copy, duplicate, download, and upload the production processes for the chemical compounds set out in the chart below from the secure database of FSI, and did transmit, communicate and convey by email such copy via his personal email address to an email address of an associate in India for use in a business other than FSI's, and each production process so copied and transmitted being a trade secret within the meaning of 18 U.S.C. § 1839(3) owned by FSI and relating to chemical compounds produced for and placed in interstate and foreign commerce:

Count	Date (on or about)	Compound	Process Identifier
1	July 15, 2011	meso-Tetra(2-pyridyl) porphyrin	PM11-5413
2	September 1, 2011	meso-Tetraphenylporphine	VY11-5239
3	October 24, 2011	Octaethylporphyrin	LY103588
4	October 25, 2011	2,2'-dipyrromethane	VY09-2951

5	October 26, 2011	Fe [III] meso-Tetra [o-dichlorophenyl] porphine chloride	JY11-4759; JY11-5553
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all in violation of 18 U.S.C. §1832(a)(2) and punishable thereunder.

COUNTS 6-20

1. The Grand Jury re-alleges the allegations of the Introduction portion of this Superseding Indictment, paragraphs 1 through 30, as though fully set forth herein.

2. On or about the dates set forth below, in the Northern Division of the District of Utah and elsewhere,

PRABHU PRASAD MOHAPATRA,

the Defendant herein, having devised and intending to devise a scheme and artifice to defraud, and for obtaining money and property by means of false and fraudulent pretenses, to wit, the enrichment of the defendant from the solicitation of work contracts from the defendant's employer, FSI, to a company in which the defendant had an undisclosed ownership interest, and the utilization of FSI's intellectual property for his personal financial gain and the gain of one or more

others, for the purpose of executing such scheme and artifice did knowingly transmit and cause to be transmitted by means of wire communication in interstate and foreign commerce writings, signs, signals and sounds:

A. THE SCHEME AND ARTIFICE TO DEFRAUD

The purpose of the scheme and artifice was to enrich the defendant through the creation of a new company in India in which the defendant would be an undisclosed principal, the business of such company to be the production of chemical compounds on contract, and which contracts were to be solicited from defendant's employer, FSI, FSI's sister company Echelon Biosciences, Inc. (EBI), and competitors of FSI. It was the further purpose of the scheme and artifice to deprive FSI of its intellectual property by usurping its proprietary methods of chemical compound production for the benefit of defendant's business partner and their new company. It was part of the scheme and artifice to defraud that —

- a. MOHAPATRA solicited FSI to contract with A.B. for A.B. to synthesize chemical compounds for FSI;
- b. MOHAPATRA provided A.B. with unauthorized assistance in filling an order from FSI by providing A.B. with a confidential chemical compound production process developed and used by FSI;

c. MOHAPATRA recruited A.B. to join MOHAPATRA in forming a new company in India for the custom synthesis of chemical compounds in the same market as FSI;

d. MOHAPATRA devised to hide his participation in the new company from FSI by keeping his own name off the public-facing documents of the company, such as its registration and website;

e. MOHAPATRA devised to obtain income for the new company by soliciting orders for the custom synthesis of chemical compounds from FSI, FSI's affiliates, and FSI's competitors; and

f. MOHAPATRA provided A.B. with confidential chemical compound production processes developed and used by FSI to assist A.B. in responding to business inquiries from a direct competitor of FSI in the international chemical products market.

***B. THE TRANSMITTAL OF WRITINGS BY USE OF WIRE
COMMUNICATION IN INTERSTATE OR FOREIGN COMMERCE FOR THE
PURPOSE OF EXECUTING THE SCHEME AND ARTIFICE TO DEFRAUD***

For the purpose of executing the scheme and artifice described herein, the Defendant knowingly transmitted and caused to be transmitted by means of wire communication in interstate and foreign commerce writings, signs, signals and

sounds, as detailed below:

Count	Date (on or about)	Type of Wire Communication	From	To	Content
6	Aug. 9, 2011	email	Mohapatra	A.B.	Subject: Re: Overhead expenditure; responding to email regarding costs for new joint venture.
7	Sept. 1, 2011	email	Mohapatra	A.B.	Subject: Confidential; responding to email request from A.B. for tetraphenylporphine synthesis with FSI process.
8	Sept. 4, 2011	email	Mohapatra	A.B.	Subject: Re: New Company; explaining plan to "make new products . . .and market and sell it through Frontier Scientific . . ."
9	Sept. 6, 2011	email	Mohapatra	A.B.	Subject: Re Company Formation; discussing details of establishment of company, and

					stating intent to keep name off website "for obvious reasons."
10	Sept. 11, 2011	email	Mohapatra	A.B.	Subject: Re: NRI related issues; explaining that Mohapatra's brother-in-law, H.K., will be joint owner of company on Mohapatra's behalf, to avoid any problems with non-resident Indian ownership.
11	Sept. 16, 2011	email	Mohapatra	A.B.	Subject: Re: Porphyrin molecule; discussing problems of A.B. getting orders from FSI and promising suggestions for sources of work for new company.
12	Sept. 25, 2011	email	Mohapatra	A.B.	Subject: Re: New Porphyrin Products [sic]; explaining that FSI will not purchase porphyrin products suggested by A.B., and advising marketing

					to FSI affiliate EBI instead.
13	Sept. 29, 2011	email	Mohapatra	A.B.	Subject: Re: Rotavap; explaining Mohapatra will do scientific research for both DSP and new company.
14	Oct. 13, 2011	email	Mohapatra	A.B. H.K.	Subject: Re: updated MCB website - logo; discussing creation and contents of website for MedChemBlox.
15	Oct. 21, 2011	email	Mohapatra	A.B. H.K.	Subject: Re: Payment for company registartion [sic]; advising that Mohapatra would send money to H.K., and would develop the website himself.
16	Oct. 24, 2011	email	Mohapatra	A.B.	Subject: Octaethyl-porphyrin; responding to A.B.'s request for research with reply "Please find the prep for Octaethyl-porphyrin (50 g scale) attached," and

					attachment copied from FSI lab book.
17	Oct. 24, 2011	email	Mohapatra	A.B.	Subject: 1-formyl dipyrromethane and 1,9-diformyldipyrromethane; responding to A.B.'s request for research with reply "Please find the prep attached," and attachment copied from FSI lab book.
18	Oct. 25, 2011	email	Mohapatra	A.B. H.K.	Subject: Re: updated MCB website; stating "Now the site looks OK to me too. I have purchased the domain name (www.MedChemBlocks.com.)"
19	Oct. 25, 2011	email	Mohapatra	A.B.	Subject: 2,2'-Dipyrromethane; responding to A.B.'s request for research with reply "prep attached... starting material for corresponding aldehydes," and attachment copied from FSI lab book.

20	Oct. 26, 2011	email	Mohapatra	A.B.	Subject: Re: Tetrakis(2,6-dichlorophenyl) porphyrin-Fe(III) chloride; stating "Please see the prep of iron complex attached. I think the literature package is too expensive for us at present. We can not [sic] afford it. I will do all the research for you. Don't worry."

and did attempt to do the same, all in violation of 18 U.S.C. §§ 1343 and 1349, and punishable thereunder.

COUNTS 21-26

1. 1. The Grand Jury re-alleges the allegations of the Introduction portion of this Superseding Indictment, paragraphs 1 through 30, as though fully set forth herein.
2. On or about the dates set forth below, in the Northern Division of the

District of Utah and elsewhere,

PRABHU PRASAD MOHAPATRA,

the Defendant herein, knowingly and with intent to defraud, did exceed authorized access to a protected computer as defined in 18 U.S.C. § 1030(e)(2)(B), to wit, a computer used in and affecting interstate commerce at Frontier Scientific, Inc. of Logan, Utah, and by means of such conduct did further the intended fraud and did obtain things of value, in that he did access in FSI's computer information consisting of the chemical compound production processes for the chemical compounds set out in the chart below, did copy and transmit the same via email to the defendant's business partner for use by the business partner and their new joint company, and which information the defendant was not entitled to access for such purposes, or for any purpose other than his work at FSI:

Count	Date (on or about)	Compound	Process Identifier
21	July 15, 2011	meso-Tetra(2-pyridyl) porphyrin	PM11-5413
22	September 1, 2011	meso-Tetraphenylporphine	VY11-5239
23	October 24, 2011	Octaethylporphyrin	LY10-3588
24	October 24, 2011	1-formyl dipyrromethane and	PM11-5664

		1,9-diformyldipyrromethane	
25	October 25, 2011	2,2'-dipyrromethane	VY09-2951
26	October 26, 2011	Fe [III] meso-Tetra [o-dichlorophenyl] porphine chloride	JY11-4759; JY11-5553

all in violation of 18 U.S.C. § 1030(a)(4) and punishable under 18 U.S.C.

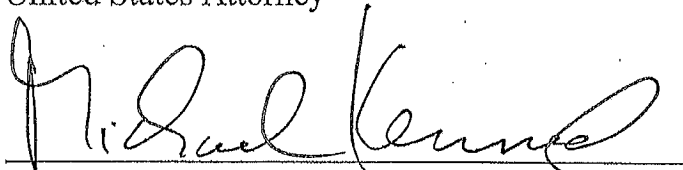
§ 1030(c)(3)(A).

A TRUE BILL:



FOREPERSON OF THE GRAND JURY

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